Data Validation Checklist Semivolatile Organic Analyses

Project:	35 TH Avenue Superfund Site	Project No:	1526850	8.20000
Laboratory:	TestAmerica - Savannah, GA ¹	Job ID.:	680-917	19-2
Method:	SW-846 8270C Low-Level (PAH)	Associated Samp	les:	Refer to Attachment A (Sample Summary)
Matrix:	Soil and Water	Samples Collecte	d:	06/25/2013
Reviewer:	Karen Marie Trujillo, URS Group	Date:		07/11/2013
Concurrence ² :	Martha Meyers-Lee, URS Group	Date:		07/12/2013

	Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1.	Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	√				
2.	Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3.	Were there any problems noted in laboratory data package concerning condition of samples upon receipt?	✓			A rinsate blank, 062513-RB-Shovel (680-91719-35), was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC) record. The Sample ID was added to COC record by laboratory.	
4.	Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5.	Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	√				
6.	Were results for all project-specified target analytes reported?	✓				
7.	Were project-specified Reporting Limits achieved for undiluted sample analyses?	>				
8.	Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		
9.	Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	√				
10.	Were target analytes detected in the method blank?		✓			
11.	Were target analytes detected in equipment/rinsate blanks?		✓		PAHs were not detected during the analysis of rinsate blank 680-91719-35 (062513-RB-Shovel).	

 $^{^{1}}$ All analytical work subcontracted to TestAmerica of Tampa, FL 2 Independent technical reviewer

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	√		1412	According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank, 680-91719-35 (062513-RB-Shovel), was collected during the week of 06/24/2013. The rinsate blank was analyzed for PAHs under this Test America Job ID.	1 1119
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			 CV1363R-CSD (680-91719-25) is a field duplicate of CV1363R-CS (680-91719-24). CV1363V-CSD (680-91719-30) is a field duplicate of CV1363V-CS (680-91719-29). 	
15. Was precision deemed acceptable as defined by the project plans?	√				
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	√			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	√				
 18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. An initial calibration is to be associated with each sample analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			 Instrument ID: BSMA5973 Initial Calibration: 06/11/2013 ICV: 06/11/13 @ 16:33 CCV: 07/02/13 @ 11:29 (Water) CCV: 07/03/13 @ 11:21 Instrument ID: BSMA5973 Initial Calibration: 07/07/2013 ICV: 07/07/13 @ 16:01 	
19. Were calibration results within laboratory/project specifications? • ICAL (Criteria: ≤15 mean %RSD with individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR r²≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): ○ If %RSD>15 (>50% for poor performers), or r <0.995, or r² <0.995, then J-flag positive results and UJ-flag non-	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
detects o If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)): o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds					
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <lower (lcl).<="" control="" limit="" td=""><td>√</td><td></td><td></td><td></td><td></td></lower>	√				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects			√	LCS Only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓	•		 Soil: Prep Batch 139005: 680-91719-21 (CV13630-CS), MS/MSD Prep Batch 139049: 680-91719-17 (Batch sample), MS/MSD. Lab sample 680-91719-17 is a project-specific sample (CV1363K-CS) that was selected by TestAmerica for the PAH MS/MSD analyses, and the results were reported under Job ID 680-91719-1. Water: Prep Batch 138871: 640-91637-41 (Batch sample), MS only. Lab sample 680-91637-41 is a project-specific sample (062013-RB-sieve) that was selected by TestAmerica for the PAH MS analyses, and the results were reported under Job ID 680-91637-2. 680-91719-35 (062513-RB-Shovel) was selected by TestAmerica for a laboratory duplicate analysis in lieu of a MSD analysis. 	

Job ID.: <u>680-91719-2</u>

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
 25. Were MS/MSD recoveries within laboratory/project specifications? Only QC results for project samples are evaluated that are reported under this Job ID are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD %R<10: J and R Flag positive and ND results, respectively MS and MSD %R >10 and <lcl: and="" j-flag="" li="" non-detect="" positive="" results<="" uj-flag=""> MS and MSD R% >UCL (or 140): J-Flag positive results </lcl:>		√ ·		 CV1363O-CS (680-91719-21): Acenaphthylene @ 37 and 37 %R (38-130). J Flag sample result. Benzo[g,h,i]perlyene @ 28 and 32 %R (32-130). Qualification of data not required³. Fluoranthene @ 102 and 174 %R (40-130). Qualification of data not required³. 	J
 26. Were laboratory criteria met for precision during the MS/MSD analysis? Only QC results for project samples are evaluated that are reported under this Job ID are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result. 		~		CV1363O-CS (680-91719-21): Benzo[k]fluoranthene @ 43%RPD (≤40). J Flag.	J
 27. Were surrogate recoveries within lab/project specifications? If %R for 1 Acid or BN surrogates <10, then J-flag positive and R-flag non-detect associated sample results If 2 or more Acid or BN %R >UCL, then J-flag positive results If 2 or more Acid or BN %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> If 2 or more Acid or BN, with 1 %R >UCL and 1 %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> </lcl,></lcl,>	~				
 28. Were internal standard (IS) results within lab/project specifications? If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results 	√				

 $^{^{\}rm 3}$ The recovery of either the MS or MSD met control limits.

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
 If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results 					
 If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 					
29. Was a laboratory duplicate analysis conducted?	✓				
30. Is the laboratory duplicate parent sample a project-specific sample?	✓			Water, Prep batch 138871: 680-91719-35 (062513-RB-Shovel).	
31. Were laboratory criteria met for precision during the laboratory duplicate analysis? Only QC results for project samples that are reported under this Job ID are evaluated.			√	An evaluation of precision is not possible, as target analytes were not detected in either sample.	
If %RPD > UCL, J-flag positive result and UJ-flag non- detect result.					
32. Were lab comments included in report?	✓			Refer to Attachment C (Case Narrative)	

Comments: The data validation was conducted in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012). The data review process was modeled after the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review (EPA, October 1999) and USEPA CLP NFG for Low Concentration Organic Methods Data Review (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-91719-21	CV1363O-CS	Solid	06/25/13 09:25	06/26/13 08:35
680-91719-22	CV1363P-CS	Solid	06/25/13 09:30	06/26/13 08:35
680-91719-23	CV1363Q-CS	Solid	06/25/13 09:49	06/26/13 08:35
680-91719-24	CV1363R-CS	Solid	06/25/13 10:03	06/26/13 08:35
680-91719-25	CV1363R-CSD	Solid	06/25/13 10:03	06/26/13 08:35
680-91719-26	CV1363S-CS	Solid	06/25/13 11:10	06/26/13 08:35
680-91719-27	CV1363T-CS	Solid	06/25/13 11:11	06/26/13 08:35
680-91719-28	CV1363U-CS	Solid	06/25/13 11:25	06/26/13 08:35
680-91719-29	CV1363V-CS	Solid	06/25/13 11:25	06/26/13 08:35
680-91719-30	CV1363V-CSD	Solid	06/25/13 11:25	06/26/13 08:35
680-91719-35	062513-RB-Shovel	Water	06/25/13 10:30	06/26/13 08:35

ATTACHMENT B FIELD DUPLICATE EVALUATION

	CV1363R-CS	DI	CV1363R-CSD			A DI5		Absolute	2x Avg	
Analyte	680-91719-24	RL	680-91719-25	RL	Unit	Avg. RLx5	RPD	difference	RL	Action
Acenaphthylene	120	47	130	47	μg/kg	235	NA	10	94	None, absolute difference $\leq 2x$ Avg RL
Anthracene	250	9.9	250	10	μg/kg	49.75	0	NA	NA	None, RPD $\leq 50\%$
Benzo(a)anthracene	350	9.4	330	9.5	μg/kg	47.25	6	NA	NA	None, RPD $\leq 50\%$
Benzo(a)pyrene	340	12	350	12	μg/kg	60	3	NA	NA	None, RPD $\leq 50\%$
Benzo(b)fluoranthene	910	14	910	15	μg/kg	72.5	0	NA	NA	None, RPD $\leq 50\%$
Benzo(g,h,i)perylene	270	23	300	24	μg/kg	117.5	11	NA	NA	None, RPD $\leq 50\%$
Benzo(k)fluoranthene	240	9.4	270	9.5	μg/kg	47.25	12	NA	NA	None, RPD $\leq 50\%$
Chrysene	830	11	710	11	μg/kg	55	16	NA	NA	None, RPD $\leq 50\%$
Dibenzo(a,h)anthracene	90	23	96	24	μg/kg	117.5	NA	6	47	None, absolute difference $\leq 2x$ Avg RL
Fluoranthene	350	23	380	24	μg/kg	117.5	8	NA	NA	None, RPD $\leq 50\%$
Fluorene	14	J 23	15 J	24	μg/kg	117.5	NA	1	47	None, absolute difference $\leq 2x$ Avg RL
Indeno(1,2,3-cd)pyrene	280	23	300	24	μg/kg	117.5	7	NA	NA	None, RPD $\leq 50\%$
1-Methylnaphthalene	66	47	82	47	μg/kg	235	NA	16	94	None, absolute difference $\leq 2x$ Avg RL
2-Methylnaphthalene	77	47	88	47	μg/kg	235	NA	11	94	None, absolute difference $\leq 2x$ Avg RL
Naphthalene	57	47	73	47	μg/kg	235	NA	16	94	None, absolute difference $\leq 2x$ Avg RL
Phenanthrene	140	0.4	180	9.5	μg/kg	24.75	25	NA	NA	None, RPD $\leq 50\%$
Pyrene	340	23	350	24	μg/kg	117.5	3	NA	NA	None, RPD $\leq 50\%$

Note: If the analyte was not detected, then the cell was left blank.

μg/kg - micrograms per kilogram

J - Estimated value

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

	CV1363V-CS			680-91719-30						Absolute	2x Avg	
Analyte	680-91719-29		RL	680-91166-2		RL	Unit	Avg. RLx5	RPD	difference	RL	Action
Acenaphthylene	26	J	48	30	J	47	μg/kg	237.5	NA	4	95	None, absolute difference $\leq 2x$ Avg RL
Anthracene	38		10	43		9.9	μg/kg	49.75	NA	5	19.9	None, absolute difference $\leq 2x$ Avg RL
Benzo(a)anthracene	97		9.6	96		9.5	μg/kg	47.75	1	NA	NA	None, RPD $\leq 50\%$
Benzo(a)pyrene	99		12	100		12	μg/kg	60	1	NA	NA	None, RPD $\leq 50\%$
Benzo(b)fluoranthene	150		15	180		14	μg/kg	72.5	18	NA	NA	None, RPD $\leq 50\%$
Benzo(g,h,i)perylene	86		24	80		24	μg/kg	120	NA	6	48	None, absolute difference $\leq 2x$ Avg RL
Benzo(k)fluoranthene	50		9.6	45		9.5	μg/kg	47.75	NA	5	19.1	None, absolute difference $\leq 2x$ Avg RL
Chrysene	130		11	150		11	μg/kg	55	14	NA	NA	None, RPD $\leq 50\%$
Dibenzo(a,h)anthracene	27		24	28		24	μg/kg	120	NA	1	48	None, absolute difference $\leq 2x$ Avg RL
Fluoranthene	140		24	150		24	μg/kg	120	7	NA	NA	None, RPD $\leq 50\%$
Fluorene	7.3	J	24	8.1	J	24	μg/kg	120	NA	0.8	48	None, absolute difference $\leq 2x$ Avg RL
Indeno(1,2,3-cd)pyrene	69		24	68		24	μg/kg	120	NA	1	48	None, absolute difference $\leq 2x$ Avg RL
1-Methylnaphthalene	72		48	68		47	μg/kg	237.5	NA	4	95	None, absolute difference $\leq 2x$ Avg RL
2-Methylnaphthalene	79		48	80		47	μg/kg	237.5	NA	1	95	None, absolute difference $\leq 2x$ Avg RL
Naphthalene	57		48	61		47	μg/kg	237.5	NA	4	95	None, absolute difference $\leq 2x$ Avg RL
Phenanthrene	120		9.6	120		9.5	μg/kg	47.75	0	NA	NA	None, RPD $\leq 50\%$
Pyrene	93		24	98		24	μg/kg	120	NA	5	48	None, absolute difference $\leq 2x$ Avg RL

Note: If the analyte was not detected, then the cell was left blank.

μg/kg - micrograms per kilogram

J - Estimated value

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C
CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Job ID: 680-91719-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-91719-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 06/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.7 C.

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): 062513-RB-Shovel (680-91719-35). Sample ID was added to COC by lab.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV1363O-CS (680-91719-21), CV1363P-CS (680-91719-22), CV1363Q-CS (680-91719-23), CV1363R-CS (680-91719-24), CV1363R-CSD (680-91719-25), CV1363S-CS (680-91719-26), CV1363T-CS (680-91719-27), CV1363U-CS (680-91719-28), CV1363V-CS (680-91719-29) and CV1363V-CSD (680-91719-30) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C.

Method(s) 8270C LL: The matrix spike (MS) recoveries for batch 139030 were outside control limits. The recoveries were biased low. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8270C LL: The matrix spike / matrix spike duplicate (MS/MSD) percent recoveries and %RPD for batch 139084 were outside control limits. This is attributed to non-homogeneity of the sample matrix and matrix interferences. The data has been qualified and reported.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample 062513-RB-Shovel (680-91719-35) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C.

ATTACHMENT D QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Client Sample ID: CV1363O-CS

Date Collected: 06/25/13 09:25 Date Received: 06/26/13 08:35 Lab Sample ID: 680-91719-21

Matrix: Solid Percent Solids: 86.5

Analyte	Result Qualifier	GCMS - Low Lev RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120 U	120	23	ug/Kg	<u></u>	07/02/13 07:50	07/03/13 15:09	Dil Fac
Acenaphthylene	64 ⊁ J	47	5.9	ug/Kg	₩	07/02/13 07:50	07/03/13 15:09	1
Anthracene	120	9.8	4.9	ug/Kg	₩	07/02/13 07:50	07/03/13 15:09	
Benzo[a]anthracene	350	9.4	4.6	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Benzo[a]pyrene	340	12	6.1	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Benzo[b]fluoranthene	630	14	7.1	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Benzo[g,h,i]perylene	170 💉	23	5.2	ug/Kg	\$	07/02/13 07:50	07/03/13 15:09	
Benzo[k]fluoranthene	180 ⋰ J	9.4	4.2	ug/Kg	₩	07/02/13 07:50	07/03/13 15:09	
Chrysene	440	11	5.3	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Dibenz(a,h)anthracene	62	23	4.8	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Fluoranthene	720 🗡	23	4.7	ug/Kg	₩	07/02/13 07:50	07/03/13 15:09	
Fluorene	23 U	23	4.8	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
ndeno[1,2,3-cd]pyrene	190	23	8.3	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
-Methylnaphthalene	91	47	5.2	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
-Methylnaphthalene	140	47	8.3	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
laphthalene	180	47	5.2	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Phenanthrene	380	9.4	4.6	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Pyrene	460	23	4.3	ug/Kg	₽	07/02/13 07:50	07/03/13 15:09	
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fa
p-Terphenyl	47	30 - 130				07/02/13 07:50	07/03/13 15:09	

o-Terphenyl

Matrix: Solid Percent Solids: 87.8 g

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	39	J	110	23	ug/Kg		07/03/13 11:12	07/07/13 18:39	1
Acenaphthylene	88		46	5.7	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
Anthracene	180		9.6	4.8	ug/Kg	₩	07/03/13 11:12	07/07/13 18:39	1
Benzo[a]anthracene	540		9.1	4.4	ug/Kg	\$	07/03/13 11:12	07/07/13 18:39	1 1 1 1 1 1 1 1
Benzo[a]pyrene	630		12	5.9	ug/Kg	₩	07/03/13 11:12	07/07/13 18:39	1
Benzo[b]fluoranthene	770		14	6.9	ug/Kg	₩	07/03/13 11:12	07/07/13 18:39	1
Benzo[g,h,i]perylene	620		23	5.0	ug/Kg	\$	07/03/13 11:12	07/07/13 18:39	1
Benzo[k]fluoranthene	350		9.1	4.1	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
Chrysene	740		10	5.1	ug/Kg	₩	07/03/13 11:12	07/07/13 18:39	1
Dibenz(a,h)anthracene	160		23	4.7	ug/Kg	\$	07/03/13 11:12	07/07/13 18:39	1 1 1
Fluoranthene	1000		23	4.6	ug/Kg	₩	07/03/13 11:12	07/07/13 18:39	1
Fluorene	34		23	4.7	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
ndeno[1,2,3-cd]pyrene	540		23	8.1	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
I-Methylnaphthalene	74		46	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
2-Methylnaphthalene	100		46	8.1	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1 1 1
Naphthalene	87		46	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
Phenanthrene	470		9.1	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1
Pyrene	830		23	4.2	ug/Kg	₽	07/03/13 11:12	07/07/13 18:39	1

TestAmerica Savannah

07/03/13 11:12 07/07/13 18:39

30 - 130

63

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Client Sample ID: CV1363Q-CS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 06/25/13 09:49 Date Received: 06/26/13 08:35 Lab Sample ID: 680-91719-23

Matrix: Solid

Percent Solids: 86.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	120	U	120	23	ug/Kg	<u> </u>	07/03/13 11:12	07/07/13 18:54	
Acenaphthylene	80		46	5.8	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Anthracene	120		9.7	4.8	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Benzo[a]anthracene	330		9.2	4.5	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Benzo[a]pyrene	300		12	6.0	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Benzo[b]fluoranthene	480		14	7.0	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Benzo[g,h,i]perylene	310		23	5.1	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Benzo[k]fluoranthene	170		9.2	4.2	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Chrysene	460		10	5.2	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Dibenz(a,h)anthracene	77		23	4.7	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
luoranthene	690		23	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
luorene	22	J	23	4.7	ug/Kg	₩	07/03/13 11:12	07/07/13 18:54	
ndeno[1,2,3-cd]pyrene	270		23	8.2	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
-Methylnaphthalene	89		46	5.1	ug/Kg	₩	07/03/13 11:12	07/07/13 18:54	
-Methylnaphthalene	93		46	8.2	ug/Kg	₩	07/03/13 11:12	07/07/13 18:54	
laphthalene	75		46	5.1	ug/Kg	₩	07/03/13 11:12	07/07/13 18:54	
Phenanthrene	410		9.2	4.5	ug/Kg	₩	07/03/13 11:12	07/07/13 18:54	
Pyrene	460		23	4.3	ug/Kg	₽	07/03/13 11:12	07/07/13 18:54	
Gurrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
p-Terphenyl	52		30 - 130				07/03/13 11:12	07/07/13 18:54	

Date Collected: 06/25/13 10:03 Date Received: 06/26/13 08:35

o-Terphenyl

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	23	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Acenaphthylene	120		47	5.9	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	Dil Fac 1 1
Anthracene	250		9.9	4.9	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Benzo[a]anthracene	350		9.4	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 19:09	1 1
Benzo[a]pyrene	340		12	6.1	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Benzo[b]fluoranthene	910		14	7.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1 1 1 1
Benzo[g,h,i]perylene	270		23	5.2	ug/Kg	₽	07/03/13 11:12	07/07/13 19:09	1
Benzo[k]fluoranthene	240		9.4	4.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Chrysene	830		11	5.3	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Dibenz(a,h)anthracene	90		23	4.8	ug/Kg	₽	07/03/13 11:12	07/07/13 19:09	
Fluoranthene	350		23	4.7	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Fluorene	14	J	23	4.8	ug/Kg	₽	07/03/13 11:12	07/07/13 19:09	1
Indeno[1,2,3-cd]pyrene	280		23	8.3	ug/Kg	₽	07/03/13 11:12	07/07/13 19:09	1
1-Methylnaphthalene	66		47	5.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
2-Methylnaphthalene	77		47	8.3	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Naphthalene	57		47	5.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1
Phenanthrene	140		9.4	4.6	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1 1 1 1 1 1
Pyrene	340		23	4.3	ug/Kg	₩	07/03/13 11:12	07/07/13 19:09	1

TestAmerica Savannah

07/03/13 11:12 07/07/13 19:09

30 - 130

55

Percent Solids: 85.0 2

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Client Sample ID: CV1363R-CSD

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 06/25/13 10:03 Date Received: 06/26/13 08:35

Lab Sample ID: 680-91719-25

Matrix: Solid Percent Solids: 84.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	-	07/03/13 11:12	07/07/13 19:24	1
Acenaphthylene	130		47	5.9	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1 ,
Anthracene	250		10	5.0	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Benzo[a]anthracene	330		9.5	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 19:24	
Benzo[a]pyrene	350		12	6.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1
Benzo[b]fluoranthene	910		14	7.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1; 1; 1; 1.
Benzo[g,h,i]perylene	300		24	5.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1
Benzo[k]fluoranthene	270		9.5	4.3	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	
Chrysene	710		11	5.3	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1 . 1 . 1 ;
Dibenz(a,h)anthracene	96		24	4.9	ug/Kg	₽	07/03/13 11:12	07/07/13 19:24	1.
Fluoranthene	380		24	4.7	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1 ;
Fluorene	15	J	24	4.9	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1 ;
Indeno[1,2,3-cd]pyrene	300		24	8.4	ug/Kg	₽	07/03/13 11:12	07/07/13 19:24	
1-Methylnaphthalene	82		47	5.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:24	1 ⁻

47

47

9.5

24

Limits

30 - 130

88

73

180

350

%Recovery Qualifier

55

56

8.4 ug/Kg

5.2 ug/Kg

4.6 ug/Kg

4.4 ug/Kg

Dil Fac Prepared Analyzed 07/03/13 11:12 07/07/13 19:24

07/07/13 19:24

07/07/13 19:24

07/07/13 19:24

07/07/13 19:24

07/03/13 11:12

07/03/13 11:12

07/03/13 11:12

07/03/13 11:12

Client Sample ID: CV1363S-CS Date Collected: 06/25/13 11:10

Date Received: 06/26/13 08:35

2-Methylnaphthalene

Naphthalene

Phenanthrene

Pyrene

Surrogate

o-Terphenyl

o-Terphenyl

Lab Sample ID: 680-91719-26 를 Matrix: Solid g Percent Solids: 88.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	23	ug/Kg	*	07/03/13 11:12	07/07/13 19:39	1
Acenaphthylene	39	J	45	5.7	ug/Kg	≎	07/03/13 11:12	07/07/13 19:39	Dil Fac
Anthracene	51		9.5	4.8	ug/Kg	₩	07/03/13 11:12	07/07/13 19:39	1;
Benzo[a]anthracene	130		9.1	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1
Benzo[a]pyrene	120		12	5.9	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1
Benzo[b]fluoranthene	200		14	6.9	ug/Kg	₩	07/03/13 11:12	07/07/13 19:39	1.
Benzo[g,h,i]perylene	120		23	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1; 1 1, 1, 1,
Benzo[k]fluoranthene	65		9.1	4.1	ug/Kg	≎	07/03/13 11:12	07/07/13 19:39	1.
Chrysene	170		10	5.1	ug/Kg	₩	07/03/13 11:12	07/07/13 19:39	1
Dibenz(a,h)anthracene	40		23	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1 <u>:</u> 1 <u>:</u> 1 <u>:</u>
Fluoranthene	200		23	4.5	ug/Kg	≎	07/03/13 11:12	07/07/13 19:39	1
Fluorene	8.0	J	23	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1
ndeno[1,2,3-cd]pyrene	95		23	8.0	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1
1-Methylnaphthalene	76		45	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1
2-Methylnaphthalene	84		45	8.0	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1 1 1 1
Naphthalene	64		45	5.0	ug/Kg	\$	07/03/13 11:12	07/07/13 19:39	1
Phenanthrene	150		9.1	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 19:39	1
Pyrene	140		23	4.2	ug/Kg	₩	07/03/13 11:12	07/07/13 19:39	1 5

TestAmerica Savannah

07/03/13 11:12 07/07/13 19:39

30 - 130

1[#]S

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Client Sample ID: CV1363T-CS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 06/25/13 11:11 Date Received: 06/26/13 08:35 Lab Sample ID: 680-91719-27

Matrix: Solid Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Acenaphthene	110	U	110	23	ug/Kg	\	07/03/13 11:12	07/07/13 19:54	
Acenaphthylene	77		45	5.7	ug/Kg	≎	07/03/13 11:12	07/07/13 19:54	
Anthracene	77		9.5	4.8	ug/Kg	≎	07/03/13 11:12	07/07/13 19:54	
Benzo[a]anthracene	170		9.1	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 19:54	
Benzo[a]pyrene	190		12	5.9	ug/Kg	≎	07/03/13 11:12	07/07/13 19:54	
Benzo[b]fluoranthene	290		14	6.9	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
Benzo[g,h,i]perylene	170		23	5.0	ug/Kg	*	07/03/13 11:12	07/07/13 19:54	
Benzo[k]fluoranthene	110		9.1	4.1	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
Chrysene	270		10	5.1	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
Dibenz(a,h)anthracene	53		23	4.7	ug/Kg	*	07/03/13 11:12	07/07/13 19:54	
Fluoranthene	340		23	4.5	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
Fluorene	11	J	23	4.7	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
ndeno[1,2,3-cd]pyrene	150		23	8.1	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
-Methylnaphthalene	60		45	5.0	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
-Methylnaphthalene	64		45	8.1	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
laphthalene	46		45	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 19:54	
Phenanthrene	190		9.1	4.4	ug/Kg	₩	07/03/13 11:12	07/07/13 19:54	
Pyrene	210		23	4.2	ug/Kg	\$	07/03/13 11:12	07/07/13 19:54	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
p-Terphenyl	56		30 - 130				07/03/13 11:12	07/07/13 19:54	

Date Collected: 06/25/13 11:25 Date Received: 06/26/13 08:35

o-Terphenyl

Matrix: Solid Percent Solids: 86.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	23	ug/Kg	₩	07/03/13 11:12	07/07/13 20:09	1
Acenaphthylene	23	J	45	5.7	ug/Kg	₩	07/03/13 11:12	07/07/13 20:09	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Anthracene	36		9.5	4.8	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1 2
Benzo[a]anthracene	79		9.1	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1 -
Benzo[a]pyrene	82		12	5.9	ug/Kg	₩	07/03/13 11:12	07/07/13 20:09	1
Benzo[b]fluoranthene	120		14	6.9	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Benzo[g,h,i]perylene	77		23	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1
Benzo[k]fluoranthene	55		9.1	4.1	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1 .
Chrysene	130		10	5.1	ug/Kg	≎	07/03/13 11:12	07/07/13 20:09	1 8
Dibenz(a,h)anthracene	24		23	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1 4 1 4 1 8
Fluoranthene	160		23	4.5	ug/Kg	≎	07/03/13 11:12	07/07/13 20:09	1 🖁
Fluorene	6.4	J	23	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1
Indeno[1,2,3-cd]pyrene	64		23	8.0	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1
1-Methylnaphthalene	48		45	5.0	ug/Kg	₩	07/03/13 11:12	07/07/13 20:09	1
2-Methylnaphthalene	53		45	8.0	ug/Kg	≎	07/03/13 11:12	07/07/13 20:09	1 <u>1</u> 1 <u>1</u>
Naphthalene	40	J	45	5.0	ug/Kg	₩	07/03/13 11:12	07/07/13 20:09	1
Phenanthrene	110		9.1	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1
Pyrene	98		23	4.2	ug/Kg	₽	07/03/13 11:12	07/07/13 20:09	1 5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analvzed	Dil Fac

TestAmerica Savannah

07/03/13 11:12 07/07/13 20:09

Page 9 of 26

30 - 130

7/9/2013

2

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Client Sample ID: CV1363V-CS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 06/25/13 11:25 Date Received: 06/26/13 08:35 Lab Sample ID: 680-91719-29

Matrix: Solid Percent Solids: 83.7

Method: 8270C LL - Semivolat Analyte		Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	\	07/03/13 11:12	07/07/13 20:24	1
Acenaphthylene	26	J	48	6.0	ug/Kg	₽	07/03/13 11:12	07/07/13 20:24	1 ,
Anthracene	38		10	5.0	ug/Kg	₽	07/03/13 11:12	07/07/13 20:24	1
Benzo[a]anthracene	97		9.6	4.7	ug/Kg	\$	07/03/13 11:12	07/07/13 20:24	1
Benzo[a]pyrene	99		12	6.2	ug/Kg	₽	07/03/13 11:12	07/07/13 20:24	1
Benzo[b]fluoranthene	150		15	7.3	ug/Kg	₽	07/03/13 11:12	07/07/13 20:24	1 '
Benzo[g,h,i]perylene	86		24	5.3	ug/Kg	\$	07/03/13 11:12	07/07/13 20:24	1
Benzo[k]fluoranthene	50		9.6	4.3	ug/Kg	₩	07/03/13 11:12	07/07/13 20:24	1
Chrysene	130		11	5.4	ug/Kg	₩	07/03/13 11:12	07/07/13 20:24	1
Dibenz(a.h)anthracene	27		24	4.9	ua/Ka	\$	07/03/13 11:12	07/07/13 20:24	1.

Dibenz(a,h)anthracene 07/03/13 11:12 Birmin 1 ₽ 24 07/07/13 20:24 **Fluoranthene** 140 4.8 ug/Kg 07/03/13 11:12 Removal Site, E 24 4.9 ug/Kg 07/03/13 11:12 07/07/13 20:24 **Fluorene** 7.3 J 24 Indeno[1,2,3-cd]pyrene 69 8.5 ug/Kg 07/03/13 11:12 07/07/13 20:24 1-Methylnaphthalene 72 48 5.3 ug/Kg 07/03/13 11:12 07/07/13 20:24 48 8.5 ug/Kg 07/03/13 11:12 07/07/13 20:24 1 1 Avenue I 2-Methylnaphthalene 79 Naphthalene 57 48 5.3 ug/Kg 07/03/13 11:12 07/07/13 20:24

 Surrogate
 %Recovery o-Terphenyl
 Qualifier o-Terphenyl
 Limits of 100 of 100

9.6

24

4.7 ug/Kg

4.4 ug/Kg

120

93

%Recovery Qualifier

Client Sample ID: CV1363V-CSD

Date Collected: 06/25/13 11:25 Date Received: 06/26/13 08:35

Phenanthrene

Pyrene

Surrogate

o-Terphenyl

Lab Sample ID: 680-91719-30

07/07/13 20:24

07/07/13 20:24

07/03/13 11:12

07/03/13 11:12

Prepared

07/03/13 11:12

Matrix: Solid & Percent Solids: 84.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	<u> </u>	07/03/13 11:12	07/07/13 20:39	Dil Fac
Acenaphthylene	30	J	47	5.9	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Anthracene	43		9.9	5.0	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Benzo[a]anthracene	96		9.5	4.6	ug/Kg	*	07/03/13 11:12	07/07/13 20:39	1 1 1 1
Benzo[a]pyrene	100		12	6.2	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Benzo[b]fluoranthene	180		14	7.2	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Benzo[g,h,i]perylene	80		24	5.2	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Benzo[k]fluoranthene	45		9.5	4.3	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Chrysene	150		11	5.3	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Dibenz(a,h)anthracene	28		24	4.9	ug/Kg	₽	07/03/13 11:12	07/07/13 20:39	1 1 1
Fluoranthene	150		24	4.7	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Fluorene	8.1	J	24	4.9	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Indeno[1,2,3-cd]pyrene	68		24	8.4	ug/Kg	₽	07/03/13 11:12	07/07/13 20:39	1
1-Methylnaphthalene	68		47	5.2	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
2-Methylnaphthalene	80		47	8.4	ug/Kg	₩	07/03/13 11:12	07/07/13 20:39	1
Naphthalene	61		47	5.2	ug/Kg	*	07/03/13 11:12	07/07/13 20:39	1
Phenanthrene	120		9.5	4.6	ug/Kg	₽	07/03/13 11:12	07/07/13 20:39	1 1 1 1 1
Pyrene	98		24	4.4	ug/Kg	₽	07/03/13 11:12	07/07/13 20:39	1

TestAmerica Savannah

Analyzed

07/07/13 20:39

Limits

30 - 130

Dil Fac

3

5

Q

10

10

-

1[#]S

1 ≗

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-91719-2

SDG: 68091719-2

Client Sample ID: 062513-RB-Shovel

Date Received: 06/26/13 08:35

Lab Sample ID: 680-91719-35 Date Collected: 06/25/13 10:30

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.9	U	1.9	0.48	ug/L		06/27/13 09:53	07/02/13 16:15	1
Acenaphthylene	0.95	U	0.95	0.24	ug/L		06/27/13 09:53	07/02/13 16:15	1 ,
Anthracene	0.19	U	0.19	0.072	ug/L		06/27/13 09:53	07/02/13 16:15	1 5
Benzo[a]anthracene	0.19	U	0.19	0.048	ug/L		06/27/13 09:53	07/02/13 16:15	1 -
Benzo[a]pyrene	0.19	U	0.19	0.054	ug/L		06/27/13 09:53	07/02/13 16:15	1
Benzo[b]fluoranthene	0.19	U	0.19	0.048	ug/L		06/27/13 09:53	07/02/13 16:15	1 9
Benzo[g,h,i]perylene	0.48	U	0.48	0.095	ug/L		06/27/13 09:53	07/02/13 16:15	1
Benzo[k]fluoranthene	0.19	U	0.19	0.054	ug/L		06/27/13 09:53	07/02/13 16:15	1
Chrysene	0.19	U	0.19	0.066	ug/L		06/27/13 09:53	07/02/13 16:15	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.048	ug/L		06/27/13 09:53	07/02/13 16:15	1.
Fluoranthene	0.48	U	0.48	0.051	ug/L		06/27/13 09:53	07/02/13 16:15	1 ;
Fluorene	1.9	U	1.9	0.48	ug/L		06/27/13 09:53	07/02/13 16:15	1 ;
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.048	ug/L		06/27/13 09:53	07/02/13 16:15	1
1-Methylnaphthalene	1.9	U	1.9	0.48	ug/L		06/27/13 09:53	07/02/13 16:15	1
2-Methylnaphthalene	1.9	U	1.9	0.48	ug/L		06/27/13 09:53	07/02/13 16:15	1
Naphthalene	1.9	U	1.9	0.24	ug/L		06/27/13 09:53	07/02/13 16:15	1
Phenanthrene	0.48	U	0.48	0.19	ug/L		06/27/13 09:53	07/02/13 16:15	15
Pyrene	0.48	U	0.48	0.085	ug/L		06/27/13 09:53	07/02/13 16:15	1 -
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenvl			30 - 130				06/27/13 09:53	07/02/13 16:15	

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)